CLAIMS

1.   A method of compressing a digital image stored at a first resolution in a memory, the image including a background region and a region of interest, the method including the steps of:

reading the background region from the memory at a second resolution, the second resolution being lower than the first resolution;

reading the region of interest from the memory at a third resolution, the third resolution being greater than the second resolution;

compressing the background region and the region of interest.

2.   A method of compressing according to claim 1, wherein compressing the background region and the region of interest includes:

compressing the background region using a first level of compression; and

compressing the region of interest using a second level of compression.

3.   A method according to either one of claims 1 or
2, wherein the background region is read at a smaller
size than the equivalent region in the recorded image.

4.   A method according to claim 3, wherein the
background region is read at less than one quarter of the
size of the equivalent region in the recorded image.

5.   A method according to any one of the preceding
claims, wherein the third resolution is the same as the
first resolution.

6.   A method according to claim 1, wherein reading
the background region from the memory includes the steps
of:
    reading the image from the memory at a second
resolution,
    masking the region of interest in the read image.

7.   A method according to claim 6, wherein the
masking step includes blanking out the region of interest
in the read image with data selected to produce the
minimum amount of compressed data for that region.

8.   A method according to either one of claims 6 or 7, wherein the image is read at a smaller size than the recorded image.

9.   A method according to claim 8, wherein the image is read at less than one quarter of the size of the recorded image.

10.   A method according to any one of the preceding claims, wherein the second level of compression is lower than the first level of compression

11.   A method according to any one of the preceding claims, wherein the second level of compression is such that the region of interest is not compressed.

12.   A method according to any one of the preceding claims including the step of converting analogue data into the digital image prior to storing it in the memory.

13.   A method of decompressing an image compressed by a method according to any one of claims 1 to 12, including the steps of:

      decompressing the region of interest;

      decompressing the background region;

reading the decompressed background region and region of interest at a fourth resolution;

merging the read decompressed region of interest with the read decompressed background region.

14. A method according to claim 13 including the step of displaying a re-formed image.

15. A method according to either one of claims 13 or 14, wherein the fourth resolution is greater than the second resolution.

16. A method according to any one of claims 13 to 15, wherein the fourth resolution is the same as the third resolution.

17. A method according to any one of claims 13 to 15, wherein the fourth resolution is the same as the first resolution.

18. Apparatus for compressing a digital image stored at a first resolution in a memory, the image including a background region and a region of interest, the apparatus having:

a video compressor/decompressor for reading the
background region and the region of interest from the
memory at second and third resolutions respectively, and
compressing the background region and the region of
interest; and

processing means for controlling the video
coder/decoder.

19. Apparatus according to claim 18 including input
means for capturing the original image.

20. Apparatus according to claim 19, wherein the
input means captures the image as analogue data, and the
apparatus includes a digitiser to convert the analogue
data to a digital image.

21. Apparatus according to any one of claims 18 to
20 including processing means for decompressing the
compressed background region and region of interest,
reading them at a fourth resolution, and merging them to
form a decompressed image.

22. Apparatus according to claim 21 including
display means for showing the decompressed image.